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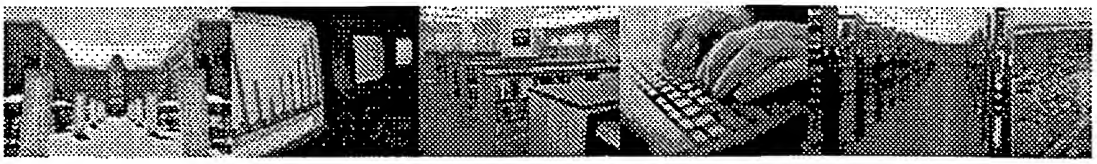

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(*e.g., Susan.Smith@uspto.gov*)

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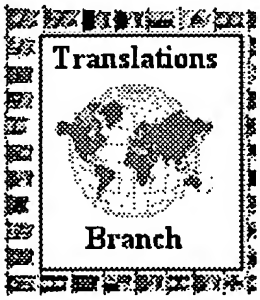
1. ☑ Patent

* Document No.: *(include KIND CODE i.e. A, B, B1, C, U, etc.)*	JP08022986A
* Country Code:	JP
* Publication Date:	1/23/1996
* Language:	JAPEANESE
First Inventor Name:	KITO,HIDEYOSHI

2. ☐ Article

* Author:	
* Language:	
* Country:	



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* Type of Document:

* Language:

* Country:

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L1 STRUCTURE UPLOADED
L2 1 S L1
L3 12 S L1 FUL CSS

FILE 'CAPLUS' ENTERED AT 09:55:12 ON 27 SEP 2006
L4 19 S L3

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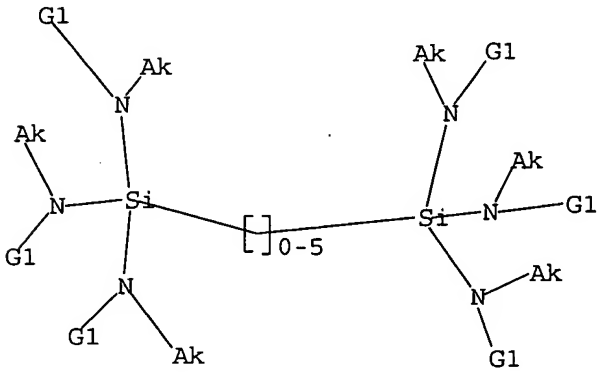
L1 HAS NO ANSWERS
L1 STR



G1 H,Ak

Structure attributes must be viewed using STN Express query preparation.

=> d bib abs hitstr 1-19

L4 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2006:317164 CAPLUS
DN 144:362341
TI pH stable chromatographic media using templated multilayer organic/inorganic grafting
IN Rustamov, Ismail M.; Chitty, Michael C.; Farkas, Tivadar; Loo, Lawrence; Welch, Emmet
PA USA
SO U.S. Pat. Appl. Publ., 13 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2006070937	A1	20060406	US 2005-240695	20050930
	WO 2006039507	A2	20060413	WO 2005-US35217	20050930
	WO 2006039507	A3	20060908		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,

SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

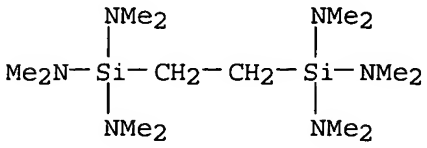
PRAI US 2004-615093P P 20041001
US 2004-615812P P 20041004

AB An advanced silica gel sorbent for use in chromatog. sepns. that was chemical modified by surface polycondensation of a trifunctional and/or difunctional organosilane. The chromatog. media exhibits a wider pH range and improved pH stability as compared to other silica gel based sorbents, while retaining all other pos. aspects attributed to silica gel based sorbents. A method of forming the advanced silica gel sorbent by Templated Multilayer Inorg./Organic Grafting.

IT 20248-45-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(pH stable chromatog. stationary phase using templated multilayer organic/inorg. grafting)

RN 20248-45-7 CAPLUS

CN 2,7-Diaza-3,6-disilaoctane-3,3,6,6-tetramine, N,N,N',N',N'',N'',N''',N''',2,7-decamethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:429719 CAPLUS

DN 142:472926

TI Low temperature deposition of silicon nitride

IN Senzaki, Yoshihide; Helms, Aubrey L.

PA Aviza Technology, Inc., USA

SO PCT Int. Appl., 14 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005045899	A2	20050519	WO 2004-US36018	20041029
WO 2005045899	A3	20060302		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2005227017	A1	20051013	US 2004-976697	20041028
EP 1682692	A2	20060726	EP 2004-796762	20041029

CAS ONLINE PRINTOUT

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR

PRAI US 2003-518608P P 20031031
US 2004-976697 A 20041028
WO 2004-US36018 W 20041029

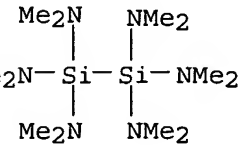
OS MARPAT 142:472926

AB A novel class of volatile liquid precursors based on amino substituted disilane compds. was used to form Si nitride dielec. materials on the surface of substrates. This class of precursors overcomes the issues of high deposition temps. and the formation of undesirable byproducts that are inherent in the present art. In another aspect, methods of depositing Si nitride films on substrates are provided.

IT 6415-17-4P
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation and low temperature deposition of silicon nitride using volatile liquid
precursors based on amino substituted disilane compds.)

RN 6415-17-4 CAPLUS

CN Disilanehexamine, dodecamethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:1037401 CAPLUS

DN 142:14033

TI CVD method for forming silicon nitride film

IN Kato, Hitoshi; Fukushima, Kohei; Yonezawa, Masato; Hiraga, Junya

PA Tokyo Electron Limited, Japan

SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004105115	A1	20041202	WO 2004-JP7311	20040521
JP 2005012168	A2	20050113	JP 2004-45508	20040220

PI WO 2004105115 A1 20041202 WO 2004-JP7311 20040521
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
JP 2005012168 A2 20050113 JP 2004-45508 20040220

PRAI JP 2003-148332 A 20030526
JP 2004-45508 A 20040220

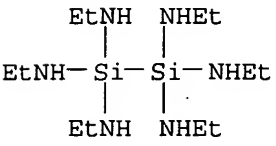
AB A CVD method for forming a Si nitride film comprises a step where while exhausting air from a process chamber in which a substrate to be processed is placed, a silane gas and NH3 gas are supplied into the chamber and a Si

nitride film is formed on the substrate by CVD. This Si nitride film-forming step comprises a 1st period during when the silane gas is supplied into the process chamber and a 2nd period during when the supply of the silane gas is suspended, and the 1st period alternates with the 2nd period.

IT 532980-53-3
RL: NUU (Other use, unclassified); USES (Uses)
(CVD of silicon nitride film)

RN 532980-53-3 CAPLUS

CN Disilanehexamine, N,N',N'',N''',N'''',N'''''-hexaethyl- (9CI) (CA INDEX NAME)



RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L4 ANSWER 4 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:569892 CAPLUS

DN 141:106612

TI Preparation of amino substituted disilane derivatives for composition and method for low temperature deposition of silicon-containing films

IN Wang, Ziyun; Xu, Chongying; Baum, Thomas H.; Hendrix, Bryan; Roeder, Jeffrey F.

PA USA

SO U.S. Pat. Appl. Publ., 9 pp., Cont.-in-part of U.S. Ser. No. 294,431.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004138489	A1	20040715	US 2003-699079	20031031
	US 2004096582	A1	20040520	US 2002-294431	20021114
	WO 2004044958	A2	20040527	WO 2003-US36097	20031112
	WO 2004044958	A3	20040826		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003287710	A1	20040603	AU 2003-287710	20031112
	EP 1567531	A2	20050831	EP 2003-781915	20031112
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2006517517	T2	20060727	JP 2004-552143	20031112
PRAI	US 2002-294431	A2	20021114		
	US 2003-699079	A	20031031		
	WO 2003-US36097	W	20031112		

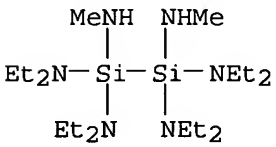
OS CASREACT 141:106612; MARPAT 141:106612

CAS ONLINE PRINTOUT

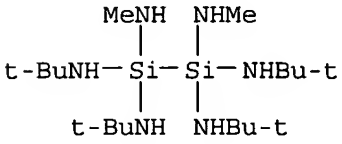
AB This invention relates to silicon precursor compns. for forming silicon-containing films by low temperature (e.g., <300°) chemical vapor deposition processes for fabrication of ULSI devices and device structures. Such silicon precursor compns. comprise at least one disilane derivative compound that is fully substituted with alkylamino and/or dialkylamino functional groups. Thus, amination of (Et2N)2(Cl)SiSi(Cl)(NEt2) with Me2NH in Et2O gave 90% (Et2N)(NHMe)SiSi(NHMe)(NEt2)2 which was used as silicon precursor for silicon-containing films.

IT 693827-57-5P 693827-58-6P
RL: NUU (Other use, unclassified); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of amino substituted disilane derivs. for composition and method for
low temperature deposition of silicon-containing films)

RN 693827-57-5 CAPLUS
CN Disilanehexamine, N1,N1,N1',N1',N2,N2,N2'N2'-octaethyl-N1'',N2''-dimethyl- (9CI) (CA INDEX NAME)

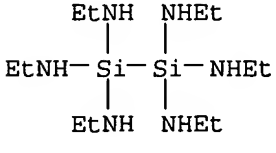


RN 693827-58-6 CAPLUS
CN Disilanehexamine, N1,N1',N2,N2'-tetrakis(1,1-dimethylethyl)-N1'',N2''-dimethyl- (9CI) (CA INDEX NAME)



IT 532980-53-3
RL: NUU (Other use, unclassified); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(preparation of amino substituted disilane derivs. for composition and method for
low temperature deposition of silicon-containing films)

RN 532980-53-3 CAPLUS
CN Disilanehexamine, N,N',N'',N''',N'''',N'''''-hexaethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 5 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:433929 CAPLUS

CAS ONLINE PRINTOUT

DN 141:15676
TI Composition and method for low temperature deposition of silicon-containing films such as films including silicon, silicon nitride, silicon dioxide and/or silicon oxynitride
IN Wang, Ziyun; Xu, Chongying; Laxman, Ravi K.; Baum, Thomas H.; Hendrix, Bryan; Roeder, Jeffrey
PA Advanced Technology Materials, Inc., USA
SO PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004044958	A2	20040527	WO 2003-US36097	20031112
	WO 2004044958	A3	20040826		
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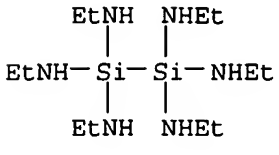
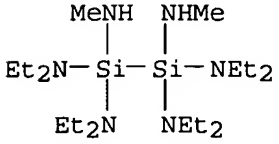
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2004096582	A1	20040520	US 2002-294431	20021114
	US 2004138489	A1	20040715	US 2003-699079	20031031
	AU 2003287710	A1	20040603	AU 2003-287710	20031112
	EP 1567531	A2	20050831	EP 2003-781915	20031112
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2006517517	T2	20060727	JP 2004-552143	20031112
PRAI	US 2002-294431	A	20021114		
	US 2003-699079	A	20031031		
	WO 2003-US36097	W	20031112		

OS MARPAT 141:15676
AB Si precursors for forming Si-containing films in the manufacture of semiconductor devices, such as low dielec. constant (k) thin films, high k gate silicates, low temperature Si epitaxial films, and films containing Si nitride (Si3N4), silicon oxynitride (SiOxNy) and/or SiO2. The precursors of the invention are amenable to use in low temperature (e.g., < 500° or <300°) CVD processes, for fabrication of ULSI devices and device structures.
IT 532980-53-3P, Disilanehexamine, N,N',N'',N''',N'''',N'''''-hexaethyl- 693827-57-5P 693827-58-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(vapor deposition precursor; composition and method for low temperature deposition of silicon-containing films such as films including silicon, silicon nitride, silicon dioxide and/or silicon oxynitride)
RN 532980-53-3 CAPLUS
CN Disilanehexamine, N,N',N'',N''',N'''',N'''''-hexaethyl- (9CI) (CA INDEX NAME)

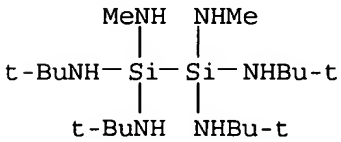
CAS ONLINE PRINTOUT



RN 693827-57-5 CAPLUS
CN Disilanehexamine, N1,N1,N1',N1',N2,N2,N2'N2'-octaethyl-N1'',N2''-dimethyl- (9CI) (CA INDEX NAME)



RN 693827-58-6 CAPLUS
CN Disilanehexamine, N1,N1',N2,N2'-tetrakis(1,1-dimethylethyl)-N1'',N2''-dimethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:412601 CAPLUS
DN 140:432729
TI Method and precursor compounds for the low temperature deposition of silicon-containing films
IN Wang, Ziyun; Xu, Chongying; Laxman, Ravi K.; Baum, Thomas H.; Hendrix, Bryan; Roeder, Jeffrey
PA USA
SO U.S. Pat. Appl. Publ., 20 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 3

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004096582	A1	20040520	US 2002-294431	20021114
US 2004138489	A1	20040715	US 2003-699079	20031031
WO 2004044958	A2	20040527	WO 2003-US36097	20031112
WO 2004044958	A3	20040826		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CAS ONLINE PRINTOUT

	AU 2003287710	A1	20040603	AU 2003-287710	20031112
	EP 1567531	A2	20050831	EP 2003-781915	20031112
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2006517517	T2	20060727	JP 2004-552143	20031112
PRAI	US 2002-294431	A2	20021114		
	US 2003-699079	A	20031031		
	WO 2003-US36097	W	20031112		

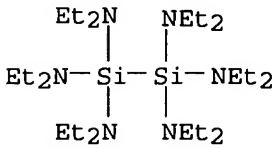
OS MARPAT 140:432729

AB The invention relates to a method and precursor compds. for the low temperature deposition of silicon-containing films, such that the films are more easily deposited with tight geometric features and reduced feature size. The silicon-containing films include low dielec. constant thin films, high-k gate silicates, low temperature silicon epitaxial films, and films containing silicon nitride (Si_3N_4), siliconoxynitride (SiO_xN_y) and/or silicon dioxide (SiO_2). The precursors of the invention are amenable to use in low temperature (<500°) chemical vapor deposition processes, for fabrication of ULSI devices and device structures.

IT 145700-17-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(vapor deposition precursor; method and precursor compds. for low temperature deposition of silicon-containing films)

RN 145700-17-0 CAPLUS

CN Disilanehexamine, dodecaethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:434792 CAPLUS

DN 139:15272

TI Method for depositing silicon nitride films and silicon oxynitride films by chemical vapor deposition

IN Dussarrat, Christian; Girard, Jean-Marc

PA Air Liquide SA pour l'Etude et l'Exploitation des Procedes Georges Claude, Fr.

SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003046253	A1	20030605	WO 2002-EP13869	20021127
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,				

CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	JP 2003168683	A2	20030613	JP 2001-367126	20011130
	AU 2002356634	A1	20030610	AU 2002-356634	20021127
	EP 1458903	A1	20040922	EP 2002-803815	20021127
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	US 2005037627	A1	20050217	US 2004-497455	20041012
	US 6936548	B2	20050830		
PRAI	JP 2001-367126	A	20011130		
	WO 2002-EP13869	W	20021127		

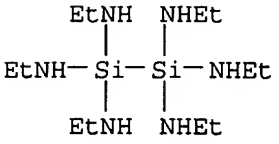
OS MARPAT 139:15272

AB This invention describes a method for the production of Si nitride and Si oxynitride films by CVD technol., wherein said method provides acceptable film deposition rates even at lower temps. and is not accompanied by the production of large amts. of NH4Cl. Use of a hydrocarbylaminodisilane compound (R0)3-Si-Si-(R0)3 {each R0 is independently selected from the hydrogen atom, chlorine atom, and -NR1(R2) groups (wherein R1 and R2 are each independently selected from the hydrogen atom and C1 to C4 hydrocarbyl with the proviso that R1 and R2 may not both be the hydrogen atom) and at least one R0 is the -NR1(R2) group} as a precursor for Si nitride and Si oxynitride.

IT 532980-53-3P
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(precursor; synthesis and use of hexakis(ethylamino)disilane in depositing silicon nitride films and silicon oxynitride films by CVD)

RN 532980-53-3 CAPLUS

CN Disilanehexamine, N,N',N'',N''',N'''',N'''''-hexaethyl- (9CI) (CA INDEX NAME)



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:434568 CAPLUS

DN 139:28880

TI Hexakis(monohydrocarbylamino) disilanes and method for the preparation thereof

IN Dussarrat, Christian; Girard, Jean-Marc

PA Air Liquide SA pour l'Etude et l'Exploitation des Procedes Georges Claude, Fr.

SO PCT Int. Appl., 13 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003045959	A1	20030605	WO 2002-EP13790	20021127
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				

PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	JP 2003171383	A2	20030620	JP 2001-367123	20011130
	AU 2002361979	A1	20030610	AU 2002-361979	20021127
	EP 1458730	A1	20040922	EP 2002-796575	20021127
	EP 1458730	B1	20060503		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	CN 1592750	A	20050309	CN 2002-823445	20021127
	AT 325127	E	20060615	AT 2002-796575	20021127
	US 2005107627	A1	20050519	US 2004-497399	20041227
	US 7019159	B2	20060328		
	US 2006030724	A1	20060209	US 2005-222361	20050908
	US 7064083	B2	20060620		
PRAI	JP 2001-367123	A	20011130		
	WO 2002-EP13790	W	20021127		
	US 2004-497399	A1	20041227		

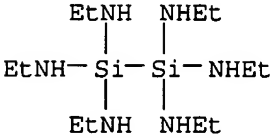
OS MARPAT 139:28880

AB This invention describes silane compds. that are free of chlorine, provide excellent film-forming characteristics at low temps. in the case of Si nitride films and Si oxynitride films, and also have excellent handling characteristics. This invention also provides a method for preparing these silane compds. which are hexakis (monohydrocarbylamino) dislanes ((R)HN)3-Si-Si-(NH(R))3 wherein each R independently represents C1 to C4 hydrocarbyl. These disilanes can be synthesized by reacting hexachlorodisilane in organic solvent with at least 6-fold moles of the monohydrocarbylamine RNH2 (wherein R is C1 to C4 hydrocarbyl).

IT 532980-53-3P, Hexakis(hydroethylamino) disilane
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation of hexakis(monohydrocarbylamino) disilanes for use in CVD of Si nitride films and Si oxynitride films)

RN 532980-53-3 CAPLUS

CN Disilanehexamine, N,N',N'',N''',N'''',N'''''-hexaethyl- (9CI) (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:398432 CAPLUS

DN 138:394066

TI Formation of oxide films for semiconductor devices

IN Machida, Hideaki; Shimoyama, Norio

PA Tri Chemical Laboratory Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF

DT Patent

LA Japanese

CAS ONLINE PRINTOUT

FAN.CNT 1

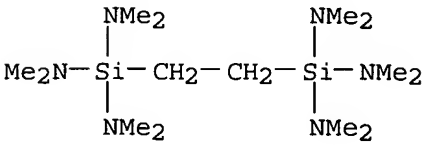
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003151972	A2	20030523	JP 2001-350486	20011115
PRAI	JP 2001-350486		20011115		

AB Si oxide type films containing at least Si, O, C and H are formed through the dissoln. of ≥1 Si type compds. RnSi(OR)4-n (R = H, alkyl, alkoxide or amino group; n = 0,1,2, 3 or 4) and R3Si(CH2)mSiR3 (R = H, alkyl, alkoxide or amino group; Rs may be different; and m = integer ≥1), and polymerization of monomers. The oxide films thus formed are suited for insulation of Cu interconnections of semiconductor devices.

IT 20248-45-7 527707-21-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(dissoln. of silicon compds. and polymerization of monomers in formation of oxide films for semiconductor devices)

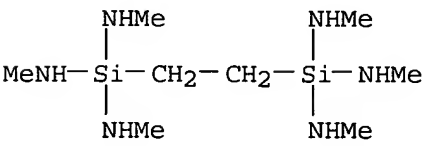
RN 20248-45-7 CAPLUS

CN 2,7-Diaza-3,6-disilaoctane-3,3,6,6-tetramine, N,N,N',N',N'',N'',N''',N''',2,7-decamethyl- (9CI) (CA INDEX NAME)



RN 527707-21-7 CAPLUS

CN Silanetriamine, 1,1'-(1,2-ethanediyl)bis[N,N',N''-trimethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 10 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:407300 CAPLUS

DN 136:410026

TI Materials and method for forming Si-type insulator films for semiconductor devices

IN Machida, Hideaki; Noda, Naoto

PA Tri Chemical Laboratory Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DT Patent

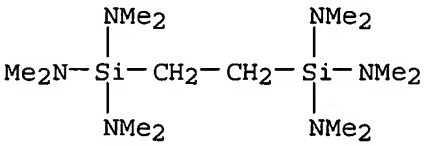
LA Japanese

FAN.CNT 1

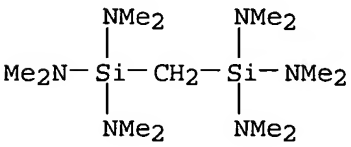
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002158223	A2	20020531	JP 2000-350528	20001117
PRAI	JP 2000-350528		20001117		

AB The insulator film are formed using Si-type materials with the formula: {R3(R4)N}3Si-{C(R1)R2}n-Si{N(R5)R6}3, where R1, R2 = H, hydrocarbon groups, or X(halogen atom)-substituted hydrocarbon groups (R1 and R2 can be same), n = 1-5 integer, R3, R4, R4 and R6 = H, hydrocarbon groups or X(halogen atom)-substituted hydrocarbon groups (R3, R4, R5 and R6 can be

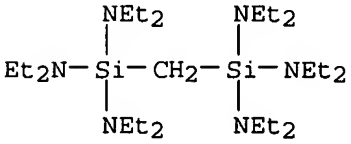
same). The insulator films may be formed on substrates by CVD.
IT 20248-45-7 75738-28-2 431949-49-4
431949-50-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(materials and method for forming Si-type insulator films for semiconductor devices)
RN 20248-45-7 CAPLUS
CN 2,7-Diaza-3,6-disilaoctane-3,3,6,6-tetramine, N,N,N',N',N'',N'',N''',N''',2,7-decamethyl- (9CI) (CA INDEX NAME)



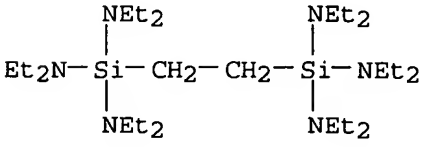
RN 75738-28-2 CAPLUS
CN 2,6-Diaza-3,5-disilaheptane-3,3,5,5-tetramine, N,N,N',N',N'',N'',N''',N''',2,6-decamethyl- (9CI) (CA INDEX NAME)



RN 431949-49-4 CAPLUS
CN Silanetriamine, 1,1'-methylenebis[N,N,N',N',N'',N''-hexaethyl- (9CI) (CA INDEX NAME)



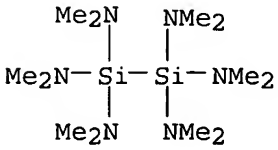
RN 431949-50-7 CAPLUS
CN Silanetriamine, 1,1'-(1,2-ethanediyl)bis[N,N,N',N',N'',N''-hexaethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 11 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2000:94721 CAPLUS
DN 132:237123
TI Disilane-Catalyzed and Thermally Induced Oligomerizations of Alkynes: A Comparison
AU Yang, Jinchao; Verkade, John G.

CAS ONLINE PRINTOUT

CS Department of Chemistry, Iowa State University, Ames, IA, 50011, USA
SO Organometallics (2000), 19(5), 893-900
CODEN: ORGND7; ISSN: 0276-7333
PB American Chemical Society
DT Journal
LA English
AB The alkynes RC.tplbond.CR (R = H, Et, Ph), RC.tplbond.CH (R = Me(CH2)5, Me(CH2)7, Ph, Me3Si, EtO2C), and RC.tplbond.CR' (R = Ph, R' = C6F5; R = Me, R' = Ph) trimerize to corresponding benzene derivs. in 30-100% yields in the presence of Si2Cl6 as a procatalyst at 170-200° over 20-48 h. These reactions represent only the 2nd example of nonmetal-catalyzed alkyne trimerizations. The unsym. alkynes Me3SiC.tplbond.CH, EtO2CC.tplbond.CH, and PhC.tplbond.CC6F5 gave sym. 1,3,5-substituted benzenes, while the others led to isomeric mixts. A 1:2 M mixture of PhC.tplbond.CH and PhC.tplbond.CPh provided an isomeric mixture (45% yield) consisting mainly of 1,2,4,5-tetraphenylbenzene. While Si2(OMe)6 also catalyzed alkyne trimerizations (though not as efficiently as Si2Cl6), Si2Me6 did not, suggesting an electronegativity influence in the formation of the Cl3Si• radicals shown to be involved in these reactions. Somewhat unexpectedly, however, neither Si2F6 nor sym-Si2Me2Cl4 catalyzed alkyne trimerizations. Exptl. support for the radical pathway proposed for the alkyne trimerization observed herein is presented. In the absence of disilane procatalyst, PhC.tplbond.CH gave an isomeric mixture of dimers, p-MeC6H4C.tplbond.CH afforded predominantly a single dimer, and 1-ethynyl-1-cyclohexene provided exclusively a single dimer, whereas RC.tplbond.CH (R = alkyl) and PhC.tplbond.CMe did not react upon heating under the same conditions.
IT 6415-17-4, Hexakis(dimethylamino)disilane
RL: CAT (Catalyst use); USES (Uses)
(thermally induced trimerization of alkynes to give benzene derivs. catalyzed by)
RN 6415-17-4 CAPLUS
CN Disilanehexamine, dodecamethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



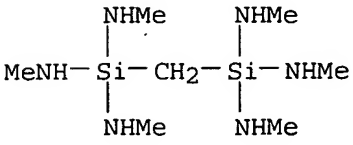
RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:442988 CAPLUS
DN 127:161886
TI Preparation and characterization of the carbosilazanes bis[tris(methylamino)silyl]methane and bis[tris(phenylamino)silyl]methane
AU Jansen, M.; Bzik, S.
CS Institut Anorganische Chemie, Universitat Bonn, Bonn, D-53121, Germany
SO Zeitschrift fuer Naturforschung, B: Chemical Sciences (1997), 52(6), 707-710
CODEN: ZNBSEN; ISSN: 0932-0776
PB Verlag der Zeitschrift fuer Naturforschung
DT Journal
LA German
AB [(RNH)3Si]2CH2 (R = Me, Ph) were synthesized as potential precursors of porous O-free solids by the reaction of (Cl3Si)2CH2 with MeNH2 and with lithiated aniline, resp. [(PhNH)3Si]2CH2 was characterized by crystal

structure anal. It crystallizes in the monoclinic space group P21/c with a 10.963(2), b 17.801(2), c 17.557(2) Å, β 97.96(2)°, and Z = 4 (R1 = 4.4%, wR2 = 9.8%, 5950 independent reflections).

IT 193748-19-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of bis[tris(organoamino)silyl]methanes)

RN 193748-19-5 CAPLUS
CN 2,6-Diaza-3,5-disilaheptane-3,3,5,5-tetramine, N,N',N'',N'''-tetramethyl- (9CI) (CA INDEX NAME)



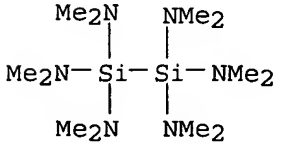
L4 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1996:212092 CAPLUS
DN 124:276075
TI Manufacture of silicon nitride-based electrically insulating film by plasma CVD
IN Kito, Hideyoshi
PA Sony Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08022986	A2	19960123	JP 1994-153855	19940705
PRAI JP 1994-153855		19940705		

AB The title method involves successive formation of (1) a SiN-based or SiON-based underlayer elec. insulating thin film with relatively high amount of hydrocarbon groups from a reactant gas containing an organic Si compound with Si-N linkage and (2) a SiN-based overlayer elec. insulating film with relatively low amount of hydrocarbon groups on a substrate by CVD. The film is useful as a passivation film or an interlayer insulating film in semiconductor devices. The film was formed with improved step coverage and showed good water resistance.

IT 6415-17-4, Hexakis(dimethylamino)disilane
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant gas; manufacture of silicon nitride-based elec. insulating film by plasma CVD)

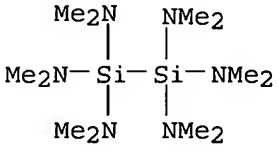
RN 6415-17-4 CAPLUS
CN Disilanehexamine, dodecamethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



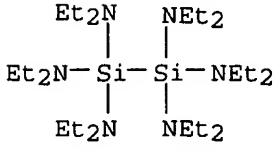
L4 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN

CAS ONLINE PRINTOUT

AN 1993:72469 CAPLUS
DN 118:72469
TI Synthesis of (dialkylamino)disilanes
AU Wan, Yanjian; Verkade, John G.
CS Dep. Chem., Iowa State Univ., Ames, IA, 50011, USA
SO Inorganic Chemistry (1993), 32(3), 341-4
CODEN: INOCAJ; ISSN: 0020-1669
DT Journal
LA English
AB The previous preparation of (Me2N)3SiSi(NMe2)3 (1) (E. Wiberg, et al., 1965) was stated to proceed quant. The present preparation repeatedly gave a mixture of only .apprx.40% 1 and 60% of (Me2N)3SiSi(NMe2)2Cl(2). 1 Was made in 84% yield by treating the aforementioned mixture with LiNMe2 in THF, and 2 can be prepared in 91% yield from Si2Cl6 and excess HNMe2 using Et2O as the solvent. Prepns. are reported for (Me2N)3SiSi(NMe)2OMe, (Et2N)3SiSi(NEt2)3, and (Me2N)3SiOSi(NMe2)3. The possible role of steric hindrance in the complete substitution of Cl groups in Si2Cl6 by NR2 moieties is discussed. Crystal data: 1; monoclinic, space group P21/c, a 9.563(1), b 13.765(1), c 8.515(9) Å, α 90.0, β 115.313(8), γ 90.0°, Z = 2, R = 0.038, Rw = 0.053. The structural metrics give some indication of steric compression of the substituents around the waist of the mol.
IT 6415-17-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and crystal structure and reactions of, with triethanolamine or tris(aminoethyl)amine)
RN 6415-17-4 CAPLUS
CN Disilanehexamine, dodecamethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



IT 145700-17-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 145700-17-0 CAPLUS
CN Disilanehexamine, dodecaethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 15 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1987:496884 CAPLUS
DN 107:96884
TI Process for the preparation of olefinic silanes and siloxanes
IN Quirk, Jennifer M.; Kanner, Bernard
PA Union Carbide Corp., USA
SO U.S., 8 pp.
CODEN: USXXAM

CAS ONLINE PRINTOUT

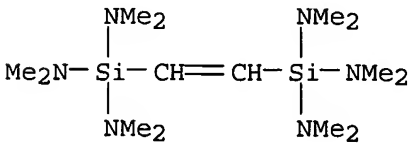
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4668812	A	19870526	US 1985-815003	19851231
	CA 1290762	A1	19911015	CA 1986-525896	19861219
	BR 8606482	A	19871020	BR 1986-6482	19861229
	AU 8667047	A1	19870702	AU 1986-67047	19861230
	AU 598780	B2	19900705		
	EP 228095	A2	19870708	EP 1986-118123	19861230
	EP 228095	A3	19880803		
	EP 228095	B1	19920122		
	R: CH, DE, FR, GB, IT, LI, NL, SE				
	JP 62164688	A2	19870721	JP 1986-315976	19861230
	JP 03053317	B4	19910814		
PRAI	US 1985-815003	A	19851231		

AB The title compds. are prepared by dehydrogenative silylation of olefins in the presence of Rh or Ru catalysts. A mixture of 25 g (Me2N)3SiH and 0.95 mg RhCl2(CO)4 in xylene was autoclaved with ethylene at 50° and 1200 psi. Heating was continued to 148° and 1450 psi where an exotherm occurred to 225° and 1900 psi. At this point the reaction was cooled giving 87.4% CH2:CHSi(NMe2)3 and 10.6% EtSi(NMe2)3. A variety of olefins and silanes and siloxanes were tried.

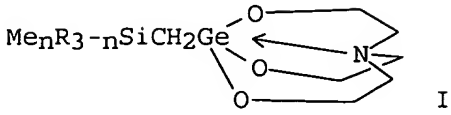
IT 109706-02-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, by dehydrogenative silylation of ethylene)

RN 109706-02-7 CAPLUS
CN 2,7-Diaza-3,6-disilaoct-4-ene-3,3,6,6-tetramine, N,N,N',N',N'',N'',N''',N''',2,7-decamethyl- (9CI) (CA INDEX NAME)

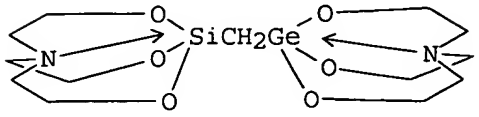


L4 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1981:15823 CAPLUS
DN 94:15823
TI Germatranes. II. Synthesis of (triorganylsilylmethyl)germatranes
AU Gar, T. K.; Khromova, N. Yu.; Nosova, V. M.; Mironov, V. F.
CS USSR
SO Zhurnal Obshchei Khimii (1980), 50(8), 1764-7
CODEN: ZOKHA4; ISSN: 0044-460X
DT Journal
LA Russian
OS CASREACT 94:15823
GI

CAS ONLINE PRINTOUT



I



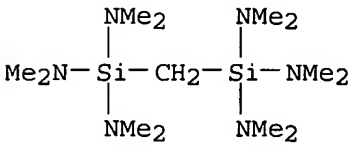
II

AB Cyclization of MenR3-nSiCH2Ge(OR1)3 (R = EtO, Me2CHO, ClCH2; R1 = Et, Me2CH; n = 0-3) with N(CH2CH2OH)3 in absence of base gave 43-91% I. Similar cyclization of (Me2N)3SiCH2Ge(NMe2)3 with N(CH2CH2OH)3 gave 31% II.

IT 75738-28-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 75738-28-2 CAPLUS

CN 2,6-Diaza-3,5-disilaheptane-3,3,5,5-tetramine, N,N,N',N',N'',N'',N''',N''',2,6-decamethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1969:439145 CAPLUS

DN 71:39145

TI Organic silicon-nitrogen compounds

IN Creamer, Charles E.

PA Union Carbide Corp.

SO Ger. Offen., 45 pp.
CODEN: GWXXBX

DT Patent

LA German

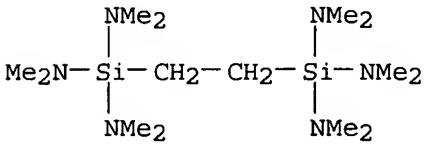
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 1800968		19690430	DE 1968-1800968	19681003
	FR 1582475			FR	
	GB 1195159			GB	
	US 3467686		19690916	US	19671003
PRAI	US		19671003		

AB The title compds. are prepared by treating at temps. >50° an organosilicon compound containing at least one Si-Cl bond with an equimolar amount of an organic base containing at least one N-H bond in the presence of approx. a stoichiometric amount Mg, Ca, or Zn, and a contact time not greater than the reaction rate of the metal with the HCl or the HCl salt (I) of the base. This process avoids the formation of a troublesome and voluminous precipitate of I. Thus, to a stirred mixture of 5021 g. Cl(SiMe2O)401SiMe2Cl and 300 g. Mg turnings at 100° is introduced 100 g. anhydrous Me2NH in such a manner

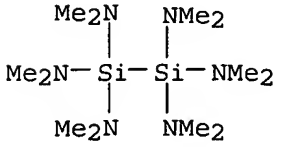
that the formation of the Me2NH.HCl is observed as a slightly turbidity and a slight temperature rise is maintained. Under these conditions the temperature rises to 113° within 1.5 hrs. and decreases to 71° after an addnl. 3 hrs. The mixture is heated 2 hrs. at 100° to remove the turbidity caused by traces of Me2NH.HCl, cooled, and filtered or decanted from precipitated MgCl2 (0.95 l.) to give 84% Me2N(SiMe2O)4·01SiMe2NMe2. Similarly are prepared 92% Me2PhSiNMe2, b2·3 53°; 81.5% [(Me2N)3SiCH2]2; 67% CH2:CHSi[N(Pr-iso)2]3; 90.5% Me2Si(NMe2)2, b. 128°; and 80.5% Me3SiNMe2, b. 82°. The compds. are useful as hydrophobic agents, intermediates for the preparation of resins, polysiloxane elastomers, and additives for lubricants and glues.

IT 20248-45-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 20248-45-7 CAPLUS
CN 2,7-Diaza-3,6-disilaoctane-3,3,6,6-tetramine, N,N,N',N',N'',N'',N''',N''',2,7-decamethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1966:67233 CAPLUS
DN 64:67233
OREF 64:12533b-c
TI Hexadimethylaminodisilane Si2(NMe2)6
AU Wiberg, Egon; Stecher, Oskar; Neumaier, Alfons
CS Univ. Munich, Germany
SO Inorg. Nucl. Chem. Letters (1965), 1(2), 33-4
DT Journal
LA German
AB The title compound (I) is prepared by decomposition of Si2Cl6 with excess dimethylamine at room temperature, by extracting with ether and by sublimation of the extract at 10-4 mm. and 70 to 80°. In damp air, I hydrolyzes slowly and is soluble in acids with decomposition to form Si2Cl6, SiCl4, HSiCl3, and HNMe2.HCl. With alkalies, I is neither soluble nor decomposed Its disproportionation into Si(NMe)4 and Si(NMe2)2 are discussed.

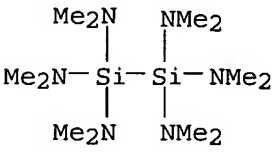
IT 6415-17-4, Disilanehexamine, dodecamethyl-
(preparation of)
RN 6415-17-4 CAPLUS
CN Disilanehexamine, dodecamethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



L4 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1966:67232 CAPLUS

CAS ONLINE PRINTOUT

DN 64:67232
OREF 64:12533a-b
TI The autoxidation of tetrakis(dimethylamino)ethylene
AU Urry, W. H.; Sheeto, J.
CS Univ. of Chicago
SO Photochemistry and Photobiology (1965), 4(6), 1067-83
CODEN: PHCBAP; ISSN: 0031-8655
DT Journal
LA English
AB The reaction of tetrakis(dimethylamino)ethylene (I) with O in non-OH solvents gives tetramethylurea, tetramethyloxamide (II), tetramethylhydrazine, and bis-(dimethylamino)methane in yields that are almost independent of solvent and temperature, or whether chemiluminescence occurs. Autoxidn. in aqueous solution, however, gives octamethyloxamidinium peroxide which hydrolyzes to give II and dimethylamine, and also undergoes demethylation to form tetramethyl 2-(dimethylamino)-2-hydroxy-2-(methylamino)acetamidinium and formate salts. Both pathways of autoxidn. occur in LiCl solns., in MeOH, and in H2O-dioxane mixts.
IT 6415-17-4, Disilanehexamine, dodecamethyl-
(preparation of)
RN 6415-17-4 CAPLUS
CN Disilanehexamine, dodecamethyl- (7CI, 8CI, 9CI) (CA INDEX NAME)



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